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TI - Semiconductor device dicing method involves dividing silicon wafer, along groove formed at wafer by dry etching using reactive gases such as xenon fluoride and sulfur hexafluoride

AB - JP2005051007 NOVELTY - The grooves (4) are formed on a silicon wafer (1) by dry etching using reactive gases such as xenon fluoride and sulfur hexafluoride. The wafer in which semiconductor devices (2) are formed, is divided along the grooves formed at wafer to obtain semiconductor chips (5).  
- USE - For dicing semiconductor device to obtain semiconductor chip e.g. micro electromechanical system (MEMS) chip.  
- ADVANTAGE - The foreign material such as scraps are not adhered to the semiconductor device and the wafer is divided easily without reducing the number of semiconductor devices on the wafer.  
- DESCRIPTION OF DRAWING(S) - The figure explains the semiconductor device dicing process.  
- silicon wafer 1  
- semiconductor device 2  
- etching mask material 3  
- groove 4  
- semiconductor chip 5  
- (Dwg.1/5)

IW - SEMICONDUCTOR DEVICE DICE METHOD DIVIDE SILICON WAFER GROOVE FORMING WAFER DRY ETCH REACT GAS XENON FLUORIDE SULPHUR

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